10/540106
JC17 Rec'd PCT/PTO 20 JUN 2005

Amendments to the Claims

1. (CURRENTLY AMENDED) A method of forming an active plate for a liquid crystal display, comprising:

depositing and patterning a substantially transparent conductor layer to define an array of pixel electrodes ~~(12)~~ over an insulating substrate arranged in rows and columns;

defining row conductors ~~(30)~~ and connected gate conductor portions ~~(30b)~~ over different areas of the insulating substrate to the pixel electrodes;

depositing and patterning thin film transistor layers ~~(66)~~ over the gate conductor portions to form transistor bodies, the thin. film transistor layers comprising at least a gate insulator ~~(70)~~ and a semiconductor layer ~~(72)~~;

forming an insulating layer ~~(76)~~ arranged as a plurality of columns, each insulating layer column overlapping the pixel electrodes ~~(12)~~ of two adjacent columns of pixels; and

forming an opaque conductor layer over the substrate and patterning the opaque conductor layer to define column conductors ~~(34)~~ on top of the insulating layer ~~(76)~~, and source ~~(82)~~ and drain ~~(84)~~ electrodes for the transistor on top of the thin film transistor layers ~~(66)~~, one of which is connected to a column conductor and the other of which is connected to an associated pixel electrode.

2. (CURRENTLY AMENDED) A method as claimed in claim 1, wherein the thin film transistor layers ~~(66)~~ of each transistor body also overlap an adjacent pixel electrode ~~(12)~~.

3. (CURRENTLY AMENDED) A method as claimed in ~~any preceding~~ claim 1, wherein the insulating layer ~~(76)~~ comprises a polymer.

4. (ORIGINAL) A method as claimed in claim 3, wherein the polymer comprises a photo-acrylic polymer.

5. (CURRENTLY AMENDED) A method as claimed in ~~claims 1 or 2~~claim 1, wherein defining the array of pixel electrodes ~~(12)~~ and the row conductors ~~(30)~~ is performed with a first, single-mask process.

6. (ORIGINAL) A method as claimed in claim 5, wherein forming transistor bodies and the insulating layer is performed with a second, single-mask process.

7. (CURRENTLY AMENDED) A method as claimed in claim 6, wherein forming the column conductors ~~(34)~~ and source and drain electrodes ~~(82,84)~~ is performed with a third, singlemask process.

8. (ORIGINAL) A method as claimed in claim 7, wherein each single mask process uses a half-tone photo-mask.

9. (CURRENTLY AMENDED) An active matrix liquid crystal display device, comprising an active plate and a passive plate with liquid crystal sandwiched between, wherein the active plate comprises:

an insulating substrate ~~(60)~~;

an array of rows and columns of pixel electrodes ~~(12)~~ and an array of row conductors ~~(30)~~, occupying different areas over the over the substrate, the pixel electrodes being substantially transparent and the row conductors ~~(30)~~ having gate conductor portions ~~(30b)~~;

thin film transistor layers ~~(66)~~ over the gate conductor portions to define

transistor bodies,

an insulating layer ~~(76)~~ arranged as a plurality of columns, each insulating layer column overlapping the pixel electrodes ~~(12)~~ of two adjacent columns of pixels;

opaque column conductors ~~(34)~~ provided on top of the insulating layer ~~(76)~~; and

source and drain electrodes ~~(82,84)~~ for the transistor on top of the thin film transistor layers ~~(66)~~ one of which is connected to a column conductor ~~(34)~~ and the other of which is connected to an associated pixel electrode ~~(12)~~.

10. (CURRENTLY AMENDED) A device as claimed in claim 9, wherein the thin film transistor layers ~~(66)~~ define, in addition to the transistor bodies, columns which lie beneath the insulating layer.

11. (CURRENTLY AMENDED) A device as claimed in ~~claims 9 or 10~~claim 9, wherein the insulating layer ~~(76)~~ comprises a polymer.

12. (ORIGINAL) A device as claimed in claim 11, wherein the polymer comprises a photo-acrylic polymer.